1642

CRF Errors Corrected by the STIC Systems Branch

Serial Number: 09/462,625 ENTERED CRF Processing Date: 5/25/2001

Edited by:

Verified by: _____ (STIC staff)

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically:

  _____
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically:

  _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:

  _____
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

  _____
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included:

  _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically:

  _____
- ☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically:

  _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically:

  _____
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☑ Other: Seq. 2 - added <2207

*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95

RAW SEQUENCE LISTING DATE: 05/25/2001
PATENT APPLICATION: **US/09/462,625** TIME: 14:38:22

Input Set : **A:\Pto.amc**
Output Set: **C:\CRF3\05252001\I462625.raw**

<110> APPLICANT: Georgiev, Georgii
Kiselev, Sergei
Prokhorchouk, Egor
Ostermann, Elinborg
<120> TITLE OF INVENTION: Tumor Growth Inhibition- and Apoptosis-Associated Genes and Polypeptides and Methods of Use Thereof
<130> FILE REFERENCE: 0652.1630001
C--> **<140> CURRENT APPLICATION NUMBER: US/09/462,625**
C--> **<141> CURRENT FILING DATE: 2000-07-28**
<150> PRIOR APPLICATION NUMBER: US 08/893,764
<151> PRIOR FILING DATE: 1997-07-11
<150> PRIOR APPLICATION NUMBER: PCT/EP98/04287
<151> PRIOR FILING DATE: 1998-07-10
<160> NUMBER OF SEQ ID NOS: 24
<170> SOFTWARE: PatentIn Ver. 2.1
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<211> LENGTH: 549
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<221> NAME/KEY: CDS
<222> LOCATION: (1)..(549)
<220> FEATURE:
<223> OTHER INFORMATION: Description of Artificial Sequence: tag7 cDNA
<400> SEQUENCE: 1

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  1               5                  10                  15

tgc agt ttc atc gtg ccc cgc agt gag tgg agg gcc ctg cca tcc gag   96
Cys Ser Phe Ile Val Pro Arg Ser Glu Trp Arg Ala Leu Pro Ser Glu
             20                  25                  30

tgc tct agc cgc ctg ggg cac cca gtt cgc tac gtg gtg atc tca cac   144
Cys Ser Ser Arg Leu Gly His Pro Val Arg Tyr Val Val Ile Ser His
         35                  40                  45

aca gcc ggc agc ttc tgc aac agc ccg gac tcc tgt gaa cag cag gcc   192
Thr Ala Gly Ser Phe Cys Asn Ser Pro Asp Ser Cys Glu Gln Gln Ala
     50                  55                  60

cgc aat gtg cag cat tac cac aag aat gag ctg ggc tgg tgc gat gta   240
Arg Asn Val Gln His Tyr His Lys Asn Glu Leu Gly Trp Cys Asp Val
 65                  70                  75                  80

gcc tac aac ttc ctt att gga gag gac ggt cat gtc tat gaa ggc cga   288
Ala Tyr Asn Phe Leu Ile Gly Glu Asp Gly His Val Tyr Glu Gly Arg
                 85                  90                  95

ggc tgg aac atc aag ggt gac cac aca ggg ccc atc tgg aat ccc atg   336
Gly Trp Asn Ile Lys Gly Asp His Thr Gly Pro Ile Trp Asn Pro Met
            100                 105                 110

tct att ggc atc acc ttc atg ggg aac ttc atg gac cgg gta ccc gca   384
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RAW SEQUENCE LISTING DATE: 05/25/2001
PATENT APPLICATION: **US/09/462,625** TIME: 14:38:22

Input Set : **A:\Pto.amc**
Output Set: **C:\CRF3\05252001\I462625.raw**

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 69 Ser Ile Gly Ile Thr Phe Met Gly Asn Phe Met Asp Arg Val Pro Ala
 70         115                 120                 125
 72 aag cgg gcc ctc cgt gct gcc cta aat ctt ctg gaa tgt ggg gtg tct   432
 73 Lys Arg Ala Leu Arg Ala Ala Leu Asn Leu Leu Glu Cys Gly Val Ser
 74     130                 135                 140
 76 cgg ggc ttc ctg aga tcc aac tat gaa gtc aaa gga cac cgg gat gtg   480
 77 Arg Gly Phe Leu Arg Ser Asn Tyr Glu Val Lys Gly His Arg Asp Val
 78 145                 150                 155                 160
 80 caa agc act ctc tct cca ggt gac caa ctc tat cag gtc atc caa agc   528
 81 Gln Ser Thr Leu Ser Pro Gly Asp Gln Leu Tyr Gln Val Ile Gln Ser
 82                 165                 170                 175
 84 tgg gaa cac tac cga gag tga                                      549
 85 Trp Glu His Tyr Arg Glu
 86             180
 89 <210> SEQ ID NO: 2
 90 <211> LENGTH: 182
 91 <212> TYPE: PRT
 92 <213> ORGANISM: Artificial Sequence
 94 <220> FEATURE:
 95 <223> OTHER INFORMATION: Description of Artificial Sequence: tag7 cDNA
 97 <400> SEQUENCE: 2
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 99   1               5                  10                  15
100 Cys Ser Phe Ile Val Pro Arg Ser Glu Trp Arg Ala Leu Pro Ser Glu
101              20                  25                  30
102 Cys Ser Ser Arg Leu Gly His Pro Val Arg Tyr Val Val Ile Ser His
103          35                  40                  45
104 Thr Ala Gly Ser Phe Cys Asn Ser Pro Asp Ser Cys Glu Gln Gln Ala
105      50                  55                  60
106 Arg Asn Val Gln His Tyr His Lys Asn Glu Leu Gly Trp Cys Asp Val
107  65                  70                  75                  80
108 Ala Tyr Asn Phe Leu Ile Gly Glu Asp Gly His Val Tyr Glu Gly Arg
109                  85                  90                  95
110 Gly Trp Asn Ile Lys Gly Asp His Thr Gly Pro Ile Trp Asn Pro Met
111             100                 105                 110
112 Ser Ile Gly Ile Thr Phe Met Gly Asn Phe Met Asp Arg Val Pro Ala
113         115                 120                 125
114 Lys Arg Ala Leu Arg Ala Ala Leu Asn Leu Leu Glu Cys Gly Val Ser
115     130                 135                 140
116 Arg Gly Phe Leu Arg Ser Asn Tyr Glu Val Lys Gly His Arg Asp Val
117 145                 150                 155                 160
118 Gln Ser Thr Leu Ser Pro Gly Asp Gln Leu Tyr Gln Val Ile Gln Ser
119                 165                 170                 175
120 Trp Glu His Tyr Arg Glu
121             180
125 <210> SEQ ID NO: 3
126 <211> LENGTH: 718
127 <212> TYPE: DNA
128 <213> ORGANISM: Homo sapiens
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RAW SEQUENCE LISTING DATE: 05/25/2001
PATENT APPLICATION: **US/09/462,625** TIME: 14:38:22

Input Set : **A:\Pto.amc**
Output Set: **C:\CRF3\05252001\I462625.raw**

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131 <221> NAME/KEY: 5'UTR
132 <222> LOCATION: (1)..(67)
134 <220> FEATURE:
135 <221> NAME/KEY: CDS
136 <222> LOCATION: (68)..(643)
138 <220> FEATURE:
139 <221> NAME/KEY: 3'UTR
140 <222> LOCATION: (644)..(718)
142 <220> FEATURE:
143 <221> NAME/KEY: polyA_site
144 <222> LOCATION: (712)..(714)
146 <400> SEQUENCE: 3
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149 ccgctct atg ctg ctt gcc tgg gct ctc ccc agc ctc ctt cga ctc gga   109
150         Met Leu Leu Ala Trp Ala Leu Pro Ser Leu Leu Arg Leu Gly
151           1               5                  10
153 gcg gct cag gag aca gaa gac ccg gcc tgc tgc agc ccc ata gtg ccc   157
154 Ala Ala Gln Glu Thr Glu Asp Pro Ala Cys Cys Ser Pro Ile Val Pro
155  15                  20                  25                  30
157 cgg aac gag tgg aag gcc ctg gca tca gag tgc gcc cag cac ctg agc   205
158 Arg Asn Glu Trp Lys Ala Leu Ala Ser Glu Cys Ala Gln His Leu Ser
159                 35                  40                  45
161 ctg ccc tta cgc tat gtg gtg gta tcg cac acg gcg ggc agc agc tgc   253
162 Leu Pro Leu Arg Tyr Val Val Val Ser His Thr Ala Gly Ser Ser Cys
163              50                  55                  60
165 aac acc ccc gcc tcg tgc cag cag cag gcc cgg aat gtg cag cac tac   301
166 Asn Thr Pro Ala Ser Cys Gln Gln Gln Ala Arg Asn Val Gln His Tyr
167          65                  70                  75
169 cac atg aag aca ctg ggc tgg tgc gac gtg ggc tac aac ttc ctg att   349
170 His Met Lys Thr Leu Gly Trp Cys Asp Val Gly Tyr Asn Phe Leu Ile
171      80                  85                  90
173 gga gaa gac ggg ctc gta tac gag ggc cgt ggc tgg aac ttc acg ggt   397
174 Gly Glu Asp Gly Leu Val Tyr Glu Gly Arg Gly Trp Asn Phe Thr Gly
175  95                  100                 105                 110
177 gcc cac tca ggt cac tta tgg aac ccc atg tcc att ggc atc agc ttc   445
178 Ala His Ser Gly His Leu Trp Asn Pro Met Ser Ile Gly Ile Ser Phe
179                 115                 120                 125
181 atg ggc aac tac atg gat cgg gtg ccc aca ccc cag gcc atc cgg gca   493
182 Met Gly Asn Tyr Met Asp Arg Val Pro Thr Pro Gln Ala Ile Arg Ala
183             130                 135                 140
185 gcc cag ggt cta ctg gcc tgc ggt gtg gct cag gga gcc ctg agg tcc   541
186 Ala Gln Gly Leu Leu Ala Cys Gly Val Ala Gln Gly Ala Leu Arg Ser
187         145                 150                 155
189 aac tat gtg ctc aaa gga cac cgg gat gtg cag cgt aca ctc tct cca   589
190 Asn Tyr Val Leu Lys Gly His Arg Asp Val Gln Arg Thr Leu Ser Pro
191     160                 165                 170
193 ggc aac cag ctc tac cac ctc atc cag aat tgg cca cac tac cgc tcc   637
194 Gly Asn Gln Leu Tyr His Leu Ile Gln Asn Trp Pro His Tyr Arg Ser
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RAW SEQUENCE LISTING DATE: 05/25/2001
PATENT APPLICATION: US/09/462,625 TIME: 14:38:22

Input Set : A:\Pto.amc
Output Set: C:\CRF3\05252001\I462625.raw

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195 175                 180                 185                 190
197 ccc tga ggccctgctg atccgcaccc cattcctccc ctcccatggc caaaaacccc    693
198 Pro
200 actgtctcct tctccaataa agatg                                      718
203 <210> SEQ ID NO: 4
204 <211> LENGTH: 191
205 <212> TYPE: PRT
206 <213> ORGANISM: Homo sapiens
208 <400> SEQUENCE: 4
209 Met Leu Leu Ala Trp Ala Leu Pro Ser Leu Leu Arg Leu Gly Ala Ala
210   1               5                  10                  15
211 Gln Glu Thr Glu Asp Pro Ala Cys Cys Ser Pro Ile Val Pro Arg Asn
212              20                  25                  30
213 Glu Trp Lys Ala Leu Ala Ser Glu Cys Ala Gln His Leu Ser Leu Pro
214          35                  40                  45
215 Leu Arg Tyr Val Val Val Ser His Thr Ala Gly Ser Ser Cys Asn Thr
216      50                  55                  60
217 Pro Ala Ser Cys Gln Gln Gln Ala Arg Asn Val Gln His Tyr His Met
218  65                  70                  75                  80
219 Lys Thr Leu Gly Trp Cys Asp Val Gly Tyr Asn Phe Leu Ile Gly Glu
220                 85                  90                  95
221 Asp Gly Leu Val Tyr Glu Gly Arg Gly Trp Asn Phe Thr Gly Ala His
222             100                 105                 110
223 Ser Gly His Leu Trp Asn Pro Met Ser Ile Gly Ile Ser Phe Met Gly
224         115                 120                 125
225 Asn Tyr Met Asp Arg Val Pro Thr Pro Gln Ala Ile Arg Ala Ala Gln
226     130                 135                 140
227 Gly Leu Leu Ala Cys Gly Val Ala Gln Gly Ala Leu Arg Ser Asn Tyr
228 145                 150                 155                 160
229 Val Leu Lys Gly His Arg Asp Val Gln Arg Thr Leu Ser Pro Gly Asn
230                 165                 170                 175
231 Gln Leu Tyr His Leu Ile Gln Asn Trp Pro His Tyr Arg Ser Pro
232             180                 185                 190
236 <210> SEQ ID NO: 5
237 <211> LENGTH: 14
238 <212> TYPE: DNA
239 <213> ORGANISM: Artificial Sequence
241 <220> FEATURE:
242 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA Primer
244 <400> SEQUENCE: 5
245 ttttttttt ttac                                                    14
248 <210> SEQ ID NO: 6
249 <211> LENGTH: 10
250 <212> TYPE: DNA
251 <213> ORGANISM: Artificial Sequence
253 <220> FEATURE:
254 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA Primer
256 <400> SEQUENCE: 6
257 aatcgggctg                                                        10
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RAW SEQUENCE LISTING DATE: 05/25/2001
PATENT APPLICATION: US/09/462,625 TIME: 14:38:22

Input Set : A:\Pto.amc
Output Set: C:\CRF3\05252001\I462625.raw

260 <210> SEQ ID NO: 7
261 <211> LENGTH: 10
262 <212> TYPE: DNA
263 <213> ORGANISM: Artificial Sequence
265 <220> FEATURE:
266 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA Primer
268 <400> SEQUENCE: 7
269 agtcagccac 10
272 <210> SEQ ID NO: 8
273 <211> LENGTH: 18
274 <212> TYPE: DNA
275 <213> ORGANISM: Artificial Sequence
277 <220> FEATURE:
278 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA Primer
280 <400> SEQUENCE: 8
281 gaaagggcct cgtgatac 18
284 <210> SEQ ID NO: 9
285 <211> LENGTH: 36
286 <212> TYPE: DNA
287 <213> ORGANISM: Artificial Sequence
289 <220> FEATURE:
290 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA Primer
292 <400> SEQUENCE: 9
293 cagggccctc cactcacttg cataggcatt tgtagc 36
296 <210> SEQ ID NO: 10
297 <211> LENGTH: 36
298 <212> TYPE: DNA
299 <213> ORGANISM: Artificial Sequence
301 <220> FEATURE:
302 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA Primer
304 <400> SEQUENCE: 10
305 gctacaaatg cctatgcaag tgagtggagg gccctg 36
308 <210> SEQ ID NO: 11
309 <211> LENGTH: 41
310 <212> TYPE: DNA
311 <213> ORGANISM: Artificial Sequence
313 <220> FEATURE:
314 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA Primer
316 <400> SEQUENCE: 11
317 ggccgctagc ctgcagttat cactctcggt agtgttccca g 41
320 <210> SEQ ID NO: 12
321 <211> LENGTH: 30
322 <212> TYPE: DNA
323 <213> ORGANISM: Artificial Sequence
325 <220> FEATURE:
326 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA Primer
328 <400> SEQUENCE: 12
329 ggcggatccg agtggagggc cctgccatcc 30
332 <210> SEQ ID NO: 13

VERIFICATION SUMMARY DATE: 05/25/2001
PATENT APPLICATION: **US/09/462,625** TIME: 14:38:23

Input Set : **A:\Pto.amc**
Output Set: **C:\CRF3\05252001\I462625.raw**

L:14 M:270 C: Current Application Number differs, Replaced Application Number
L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date

1642

RAW SEQUENCE LISTING DATE: 05/25/2001
PATENT APPLICATION: US/09/462,625 TIME: 13:39:32

Input Set : A:\seqlist- 0652 1630001.txt
Output Set: C:\CRF3\05252001\I462625.raw

Does Not Comply
Corrected Diskette Needed

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 4 <110> APPLICANT: Georgiev, Georgii
 5       Kiselev, Sergei
 6       Prokhorchouk, Egor
 7       Ostermann, Elinborg
 9 <120> TITLE OF INVENTION: Tumor Growth Inhibition- and Apoptosis-Associated Genes
10       and Polypeptides and Methods of Use Thereof
12 <130> FILE REFERENCE: 0652.1630001
C--> 14 <140> CURRENT APPLICATION NUMBER: US/09/462,625
C--> 15 <141> CURRENT FILING DATE: 2000-07-28
17 <150> PRIOR APPLICATION NUMBER: US 08/893,764
18 <151> PRIOR FILING DATE: 1997-07-11
20 <150> PRIOR APPLICATION NUMBER: PCT/EP98/04287
21 <151> PRIOR FILING DATE: 1998-07-10
23 <160> NUMBER OF SEQ ID NOS: 24
25 <170> SOFTWARE: PatentIn Ver. 2.1
27 <210> SEQ ID NO: 1
28 <211> LENGTH: 549
29 <212> TYPE: DNA
30 <213> ORGANISM: Artificial Sequence
32 <220> FEATURE:
33 <221> NAME/KEY: CDS
34 <222> LOCATION: (1)..(549)
36 <220> FEATURE:
37 <223> OTHER INFORMATION: Description of Artificial Sequence: tag7 cDNA
39 <400> SEQUENCE: 1
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41 Met Leu Phe Ala Cys Ala Leu Leu Ala Leu Leu Gly Leu Ala Thr Ser
42   1               5                  10                  15
44 tgc agt ttc atc gtg ccc cgc agt gag tgg agg gcc ctg cca tcc gag   96
45 Cys Ser Phe Ile Val Pro Arg Ser Glu Trp Arg Ala Leu Pro Ser Glu
46              20                  25                  30
48 tgc tct agc cgc ctg ggg cac cca gtt cgc tac gtg gtg atc tca cac   144
49 Cys Ser Ser Arg Leu Gly His Pro Val Arg Tyr Val Val Ile Ser His
50          35                  40                  45
52 aca gcc ggc agc ttc tgc aac agc ccg gac tcc tgt gaa cag cag gcc   192
53 Thr Ala Gly Ser Phe Cys Asn Ser Pro Asp Ser Cys Glu Gln Gln Ala
54      50                  55                  60
56 cgc aat gtg cag cat tac cac aag aat gag ctg ggc tgg tgc gat gta   240
57 Arg Asn Val Gln His Tyr His Lys Asn Glu Leu Gly Trp Cys Asp Val
58  65                  70                  75                  80
60 gcc tac aac ttc ctt att gga gag gac ggt cat gtc tat gaa ggc cga   288
61 Ala Tyr Asn Phe Leu Ile Gly Glu Asp Gly His Val Tyr Glu Gly Arg
62                  85                  90                  95
64 ggc tgg aac atc aag ggt gac cac aca ggg ccc atc tgg aat ccc atg   336
65 Gly Trp Asn Ile Lys Gly Asp His Thr Gly Pro Ile Trp Asn Pro Met
66              100                 105                 110
68 tct att ggc atc acc ttc atg ggg aac ttc atg gac cgg gta ccc gca   384
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RAW SEQUENCE LISTING DATE: 05/25/2001
PATENT APPLICATION: US/09/462,625 TIME: 13:39:32

Input Set : A:\seqlist- 0652 1630001.txt
Output Set: C:\CRF3\05252001\I462625.raw

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 69 Ser Ile Gly Ile Thr Phe Met Gly Asn Phe Met Asp Arg Val Pro Ala
 70         115                 120                 125
 72 aag cgg gcc ctc cgt gct gcc cta aat ctt ctg gaa tgt ggg gtg tct   432
 73 Lys Arg Ala Leu Arg Ala Ala Leu Asn Leu Leu Glu Cys Gly Val Ser
 74     130                 135                 140
 76 cgg ggc ttc ctg aga tcc aac tat gaa gtc aaa gga cac cgg gat gtg   480
 77 Arg Gly Phe Leu Arg Ser Asn Tyr Glu Val Lys Gly His Arg Asp Val
 78 145                 150                 155                 160
 80 caa agc act ctc tct cca ggt gac caa ctc tat cag gtc atc caa agc   528
 81 Gln Ser Thr Leu Ser Pro Gly Asp Gln Leu Tyr Gln Val Ile Gln Ser
 82                 165                 170                 175
 84 tgg gaa cac tac cga gag tga                                     549
 85 Trp Glu His Tyr Arg Glu
 86             180
 89 <210> SEQ ID NO: 2
 90 <211> LENGTH: 182
 91 <212> TYPE: PRT
 92 <213> ORGANISM: Artificial Sequence
W--> 93 <220> FEATURE: <- add numeric identifier
 93 <223> OTHER INFORMATION: Description of Artificial Sequence: tag7 cDNA
 95 <400> SEQUENCE: 2
 96 Met Leu Phe Ala Cys Ala Leu Leu Ala Leu Leu Gly Leu Ala Thr Ser
 97   1               5                  10                  15
 98 Cys Ser Phe Ile Val Pro Arg Ser Glu Trp Arg Ala Leu Pro Ser Glu
 99              20                  25                  30
100 Cys Ser Ser Arg Leu Gly His Pro Val Arg Tyr Val Val Ile Ser His
101          35                  40                  45
102 Thr Ala Gly Ser Phe Cys Asn Ser Pro Asp Ser Cys Glu Gln Gln Ala
103      50                  55                  60
104 Arg Asn Val Gln His Tyr His Lys Asn Glu Leu Gly Trp Cys Asp Val
105  65                  70                  75                  80
106 Ala Tyr Asn Phe Leu Ile Gly Glu Asp Gly His Val Tyr Glu Gly Arg
107                  85                  90                  95
108 Gly Trp Asn Ile Lys Gly Asp His Thr Gly Pro Ile Trp Asn Pro Met
109             100                 105                 110
110 Ser Ile Gly Ile Thr Phe Met Gly Asn Phe Met Asp Arg Val Pro Ala
111         115                 120                 125
112 Lys Arg Ala Leu Arg Ala Ala Leu Asn Leu Leu Glu Cys Gly Val Ser
113     130                 135                 140
114 Arg Gly Phe Leu Arg Ser Asn Tyr Glu Val Lys Gly His Arg Asp Val
115 145                 150                 155                 160
116 Gln Ser Thr Leu Ser Pro Gly Asp Gln Leu Tyr Gln Val Ile Gln Ser
117                 165                 170                 175
118 Trp Glu His Tyr Arg Glu
119             180
123 <210> SEQ ID NO: 3
124 <211> LENGTH: 718
125 <212> TYPE: DNA
126 <213> ORGANISM: Homo sapiens
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RAW SEQUENCE LISTING DATE: 05/25/2001
PATENT APPLICATION: US/09/462,625 TIME: 13:39:32

Input Set : A:\seqlist- 0652 1630001.txt
Output Set: C:\CRF3\05252001\I462625.raw

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128 <220> FEATURE:
129 <221> NAME/KEY: 5'UTR
130 <222> LOCATION: (1)..(67)
132 <220> FEATURE:
133 <221> NAME/KEY: CDS
134 <222> LOCATION: (68)..(643)
136 <220> FEATURE:
137 <221> NAME/KEY: 3'UTR
138 <222> LOCATION: (644)..(718)
140 <220> FEATURE:
141 <221> NAME/KEY: polyA_site
142 <222> LOCATION: (712)..(714)
144 <400> SEQUENCE: 3
145 ctgagttact gggcccagag gctgggcccc tggacatgta cctgcagcca ctatgtcccg 60
147 ccgctct atg ctg ctt gcc tgg gct ctc ccc agc ctc ctt cga ctc gga   109
148         Met Leu Leu Ala Trp Ala Leu Pro Ser Leu Leu Arg Leu Gly
149           1               5                  10
151 gcg gct cag gag aca gaa gac ccg gcc tgc tgc agc ccc ata gtg ccc   157
152 Ala Ala Gln Glu Thr Glu Asp Pro Ala Cys Cys Ser Pro Ile Val Pro
153  15                  20                  25                  30
155 cgg aac gag tgg aag gcc ctg gca tca gag tgc gcc cag cac ctg agc   205
156 Arg Asn Glu Trp Lys Ala Leu Ala Ser Glu Cys Ala Gln His Leu Ser
157                  35                  40                  45
159 ctg ccc tta cgc tat gtg gtg gta tcg cac acg gcg ggc agc agc tgc   253
160 Leu Pro Leu Arg Tyr Val Val Val Ser His Thr Ala Gly Ser Ser Cys
161              50                  55                  60
163 aac acc ccc gcc tcg tgc cag cag cag gcc cgg aat gtg cag cac tac   301
164 Asn Thr Pro Ala Ser Cys Gln Gln Gln Ala Arg Asn Val Gln His Tyr
165          65                  70                  75
167 cac atg aag aca ctg ggc tgg tgc gac gtg ggc tac aac ttc ctg att   349
168 His Met Lys Thr Leu Gly Trp Cys Asp Val Gly Tyr Asn Phe Leu Ile
169      80                  85                  90
171 gga gaa gac ggg ctc gta tac gag ggc cgt ggc tgg aac ttc acg ggt   397
172 Gly Glu Asp Gly Leu Val Tyr Glu Gly Arg Gly Trp Asn Phe Thr Gly
173  95                 100                 105                 110
175 gcc cac tca ggt cac tta tgg aac ccc atg tcc att ggc atc agc ttc   445
176 Ala His Ser Gly His Leu Trp Asn Pro Met Ser Ile Gly Ile Ser Phe
177                 115                 120                 125
179 atg ggc aac tac atg gat cgg gtg ccc aca ccc cag gcc atc cgg gca   493
180 Met Gly Asn Tyr Met Asp Arg Val Pro Thr Pro Gln Ala Ile Arg Ala
181             130                 135                 140
183 gcc cag ggt cta ctg gcc tgc ggt gtg gct cag gga gcc ctg agg tcc   541
184 Ala Gln Gly Leu Leu Ala Cys Gly Val Ala Gln Gly Ala Leu Arg Ser
185         145                 150                 155
187 aac tat gtg ctc aaa gga cac cgg gat gtg cag cgt aca ctc tct cca   589
188 Asn Tyr Val Leu Lys Gly His Arg Asp Val Gln Arg Thr Leu Ser Pro
189     160                 165                 170
191 ggc aac cag ctc tac cac ctc atc cag aat tgg cca cac tac cgc tcc   637
192 Gly Asn Gln Leu Tyr His Leu Ile Gln Asn Trp Pro His Tyr Arg Ser
```

RAW SEQUENCE LISTING DATE: 05/25/2001
PATENT APPLICATION: US/09/462,625 TIME: 13:39:32

Input Set : A:\seqlist- 0652 1630001.txt
Output Set: C:\CRF3\05252001\I462625.raw

```
193 175                 180                 185                 190
195 ccc tga ggccctgctg atccgcaccc cattcctccc ctcccatggc caaaaacccc    693
196 Pro
198 actgtctcct tctccaataa agatg                                      718
201 <210> SEQ ID NO: 4
202 <211> LENGTH: 191
203 <212> TYPE: PRT
204 <213> ORGANISM: Homo sapiens
206 <400> SEQUENCE: 4
207 Met Leu Leu Ala Trp Ala Leu Pro Ser Leu Leu Arg Leu Gly Ala Ala
208   1               5                  10                  15
209 Gln Glu Thr Glu Asp Pro Ala Cys Cys Ser Pro Ile Val Pro Arg Asn
210              20                  25                  30
211 Glu Trp Lys Ala Leu Ala Ser Glu Cys Ala Gln His Leu Ser Leu Pro
212          35                  40                  45
213 Leu Arg Tyr Val Val Val Ser His Thr Ala Gly Ser Ser Cys Asn Thr
214      50                  55                  60
215 Pro Ala Ser Cys Gln Gln Gln Ala Arg Asn Val Gln His Tyr His Met
216  65                  70                  75                  80
217 Lys Thr Leu Gly Trp Cys Asp Val Gly Tyr Asn Phe Leu Ile Gly Glu
218                  85                  90                  95
219 Asp Gly Leu Val Tyr Glu Gly Arg Gly Trp Asn Phe Thr Gly Ala His
220             100                 105                 110
221 Ser Gly His Leu Trp Asn Pro Met Ser Ile Gly Ile Ser Phe Met Gly
222         115                 120                 125
223 Asn Tyr Met Asp Arg Val Pro Thr Pro Gln Ala Ile Arg Ala Ala Gln
224     130                 135                 140
225 Gly Leu Leu Ala Cys Gly Val Ala Gln Gly Ala Leu Arg Ser Asn Tyr
226 145                 150                 155                 160
227 Val Leu Lys Gly His Arg Asp Val Gln Arg Thr Leu Ser Pro Gly Asn
228                 165                 170                 175
229 Gln Leu Tyr His Leu Ile Gln Asn Trp Pro His Tyr Arg Ser Pro
230             180                 185                 190
234 <210> SEQ ID NO: 5
235 <211> LENGTH: 14
236 <212> TYPE: DNA
237 <213> ORGANISM: Artificial Sequence
239 <220> FEATURE:
240 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA Primer
242 <400> SEQUENCE: 5
243 ttttttttt ttac                                                    14
246 <210> SEQ ID NO: 6
247 <211> LENGTH: 10
248 <212> TYPE: DNA
249 <213> ORGANISM: Artificial Sequence
251 <220> FEATURE:
252 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA Primer
254 <400> SEQUENCE: 6
255 aatcgggctg                                                        10
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RAW SEQUENCE LISTING DATE: 05/25/2001
PATENT APPLICATION: US/09/462,625 TIME: 13:39:32

Input Set : A:\seqlist- 0652 1630001.txt
Output Set: C:\CRF3\05252001\I462625.raw

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agtcagccac 10
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<212> TYPE: DNA
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gaaagggcct cgtgatac 18
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<212> TYPE: DNA
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<212> TYPE: DNA
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<220> FEATURE:
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VERIFICATION SUMMARY DATE: 05/25/2001
PATENT APPLICATION: **US/09/462,625** TIME: 13:39:33

Input Set : **A:\seqlist- 0652 1630001.txt**
Output Set: **C:\CRF3\05252001\I462625.raw**

L:14 M:270 C: Current Application Number differs, Replaced Application Number
L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:93 M:258 W: Mandatory Feature missing, <220> FEATURE: